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APR 28 14

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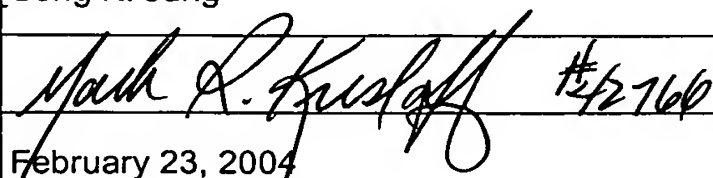
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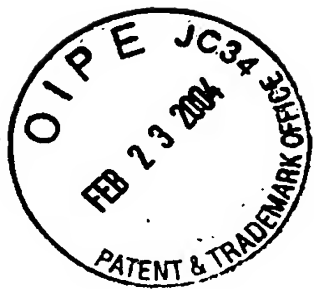
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TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	10/028,288-Conf. #2960	
	Filing Date	December 28, 2001	
	First Named Inventor	James A. Tatum	
	Art Unit	2814	
	Examiner Name	W. S. Louie	
Total Number of Pages in This Submission	1	Attorney Docket Number	H0002312

ENCLOSURES (Check all that apply)		
<input type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> After Allowance Communication to Group
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SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	MCKENNA LONG & ALDRIDGE LLP Song K. Jung
Signature	 #2760
Date	February 23, 2004



Docket No.: H0002312
(Old Docket No.: V637-02312-US)
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
James A. Tatum, et al

Confirmation No.: 2960

Application No.: 10/028,288

Group Art Unit: 2814

Filed: December 28, 2001

Examiner: W. Louie

For: VCSEL AND DETECTOR ARRAY
PACKAGING

REQUEST FOR RECONSIDERATION

Mail Stop AF
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

INTRODUCTORY COMMENTS

In response to the Office Action dated November 24, 2003 and in response to an interview held on February 2, 2004, the following remarks are respectfully submitted.

Remarks/Arguments begin on page 2 of this paper.

REMARKS

At the outset, Applicants thank the Examiner for the courtesies that were extended to the Applicants' representatives during the interview held on February 2, 2004.

In the Final Office Action, the Examiner rejected claims 1-22 under 35 U.S.C. § 103(a) as being allegedly unpatentable over Chun et al. (U.S. Patent No. 5,625,732) in view of Okazaki et al. (U.S. Patent No. 5,298,768). This rejection is respectfully traversed and reconsideration is requested.

Applicants respectfully submit that claim 1 is patentable over Chun et al. in view of Okazaki et al. in that claim 1 recites a combination of elements including, for example, "a submount having ... a plurality of conductive vias that pass through a body of the submount" and "electrical contacts of the semiconductor elements are electrically connected to said conductive vias." Neither Chun et al. nor Okazaki et al., singly or in combination, teach or suggest these features.

Nevertheless, in rejecting independent claim 1, the Examiner states that Chun et al. teaches these features because it discloses "a plurality of conductive vias 221 and 226 that pass through a body of the submount 201 (fig. 2)," and because it discloses "the semiconductor elements 107, 116, and 124 are electrically connected to the submount 102 via conductive contact 104 (fig. 1 and 2)."

It is respectfully submitted that "conductive vias" are structures that are well known in the art. Applicants direct the Examiner's attention to reference numerals 84, 86, and 88 of Figure 5 in the present application for an exemplary illustration of conductive vias. However, reference items 221 and 226 in Figure 2 of Chun et al. are not vias, as stated by the Examiner. According to the specification of Chun et al., these items are merely "slots and grooves" respectively. In fact, neither Chun et al. or Okazaki et al. ever mention "vias." Since Chun et al. nor Okazaki et al. ever mention "vias", neither one can possibly teach conductive vias that pass through the body of a submount or semiconductor elements electrically connected to conductive vias, as required by claim 1.

Claim 13 is patentable over the cited references because claim 13 recites a combination of elements including, for example, “a submount comprised of a lower portion, a conductive trace on the lower portion, an upper portion over the lower portion, and a plurality of conductive traces on the upper portion, wherein the lower portion and the conductive trace on the lower portion extend beyond the upper portion to define a mounting surface.” Neither Chun et al. nor Okazaki et al., singly or in combination, teach or suggest these features.

In his Final Office Action, the Examiner rejected claim 13 because Chun et al. allegedly teaches “[a] submount 202 comprised of a lower portion (fig. 2), a conductive trace 213 on the lower portion, an upper portion over the lower portion, and a plurality of conductive traces 223 on the upper portion, where the lower portion and the conductive trace on the lower portion extend beyond the upper portion (to reach the IC chip 207 and 208) to define a mounting surface of submount 202.” However, in the interview held on February 2, 2004, the Examiner agreed that “[s]ub-mount 202 does not show the conductive traces on the lower portion and the lower portion does not extended beyond the upper portion.” Please refer to the Interview Summary, a copy of which is attached hereto. Likewise, Okazaki et al. does not teach or suggest a submount comprising the features set forth in claim 13. Thus, the combined teaching of Chun et al. and Okazaki et al. cannot possibly render claim 13 obvious.

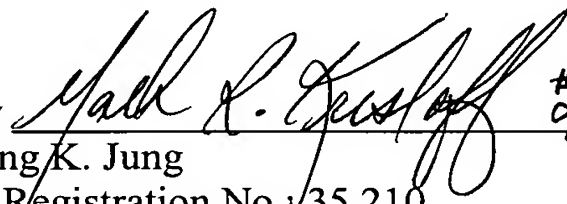
For at least the reasons set forth above, Applicants contend that independent claims 1 and 13, as well as claims 2-12 and 14-22, which variously depend therefrom, are patentable over Chun et al. in view of Okazaki et al. Consequently, the Applicants request that the Examiner withdraw the rejection of claims 1-22 under 35 U.S.C. § 103(a).

In view of the Applicants preceding remarks, Applicants respectfully request that the examiner issue a new, non-final office action, or pass the present application on to issue. If the Examiner deems that a telephone conference would further the prosecution of this application, the Examiner is invited to call the undersigned attorney at the telephone number (202) 496-7500. All correspondence should continue to be sent to the below-listed address.

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. §1.136, and any additional fees required under 37 C.F.R. §1.136 for any necessary extension of time, or any other fees required to complete the filing of this response, may be charged to Deposit Account No. 01-1125. Please credit any overpayment to deposit Account No. 01-1125.

Dated: February 23, 2004

Respectfully submitted,

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